

# DENDROPHORBIUM RESTINGAE (ASTERACEAE: SENECIONEAE), A NEW SPECIES FROM SÃO PAULO, BRAZIL

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## ABSTRACT

*Dendrophorbiumprestingae* (Asteraceae: Senecioneae), a new species from São Paulo state, Brazil, is described, illustrated, and compared with the related species *D. paranense* (Malme) Matzenb. & Baptista.

## RESUMEN

*Dendrophorbiumprestingae* (Asteraceae: Senecioneae), una nueva especie de São Paulo, Brasil, es descrita, ilustrada y comparada con la especie relacionada *D. paranense* (Malme) Matzenb. & Baptista.

*Dendrophorbiumprestingae* (Cuatrec.) C. Jeffrey is a predominantly Andean genus with about 50 species ranging from the Antilles to southern Brazil (Jeffrey 1992). Hind (1993) recorded nine species for Brazil; some years later Matzenbacher and Baptista (1997) proposed one more new combination in the genus, for a total of ten Brazilian species.

*Dendrophorbiumprestingae* was segregated from the large genus *Senecio* (Nordenstam 1996), and is recognized by its large and generally dentate leaves, corymbiform to paniculiform capitulescences, radiate heads with 8–13 glabrous phyllaries, style branches with a truncate, obtuse, or conical apex bearing a tuft of trichomes, and 5–8-ribbed cypselae with an annuliform carpopodium (Nordenstam 1996).

**Dendrophorbiumprestingae** A. Teles, J.N. Nakaj. & Stehmann, sp. nov. (**Figs. 1a, b,**

**2**). TYPE: BRAZIL. SÃO PAULO: Município de Peruíbe, Estação Ecológica Juréia-Itatins, restinga da praia do Arpoador, 22 Jun 1994, I. Cordeiro, M.M.R. Fiúza de Melo, R.J. Oliveira & M. Barros 1531 (HOLOTYPE: SP; ISOTYPE: K).



FIG. 1a. Habit of *Dendrophorbium restingae*, details of heads in upper corner right (holotype, SP).

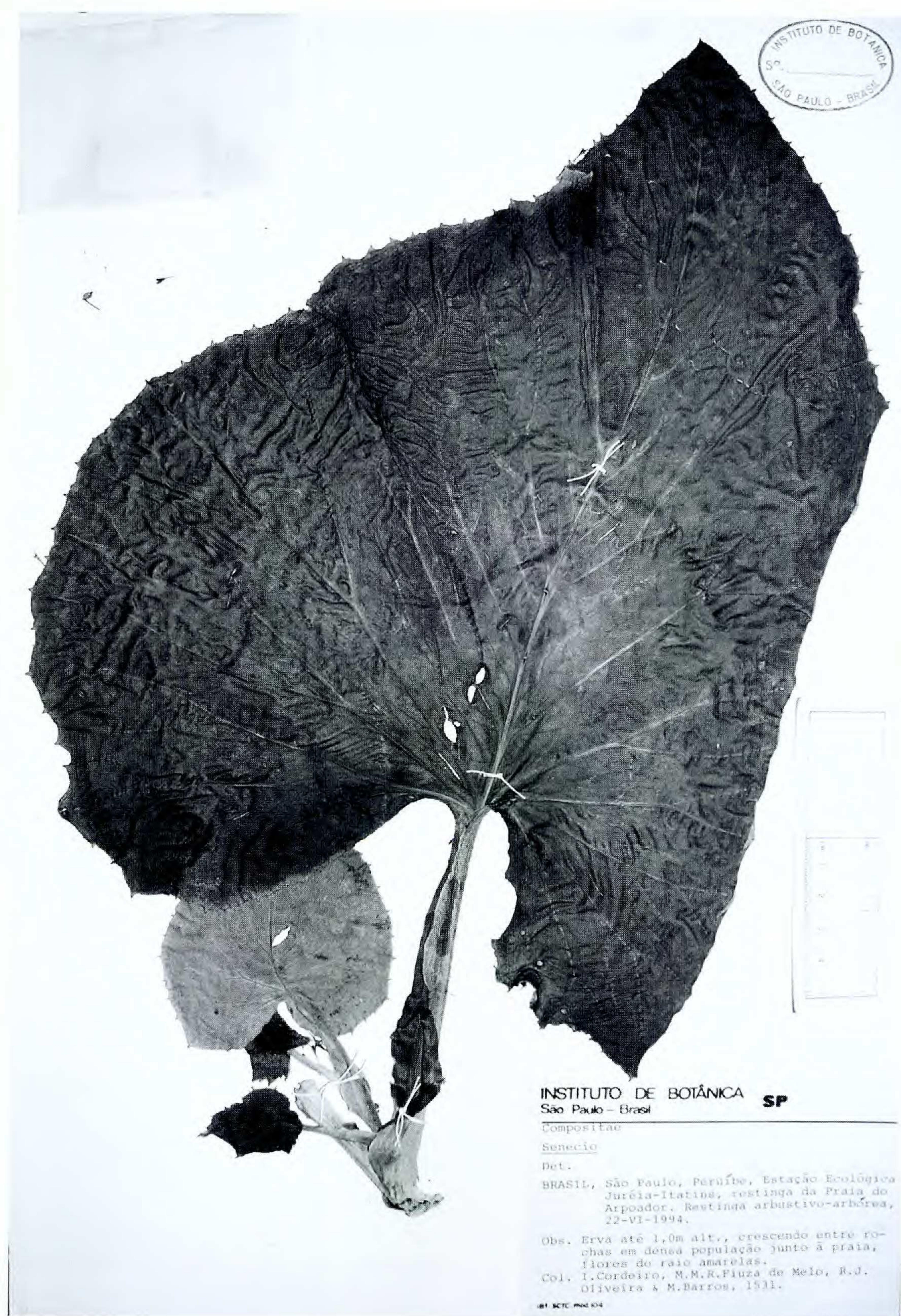


FIG. 1b. Basal leaves (holotype, SP).

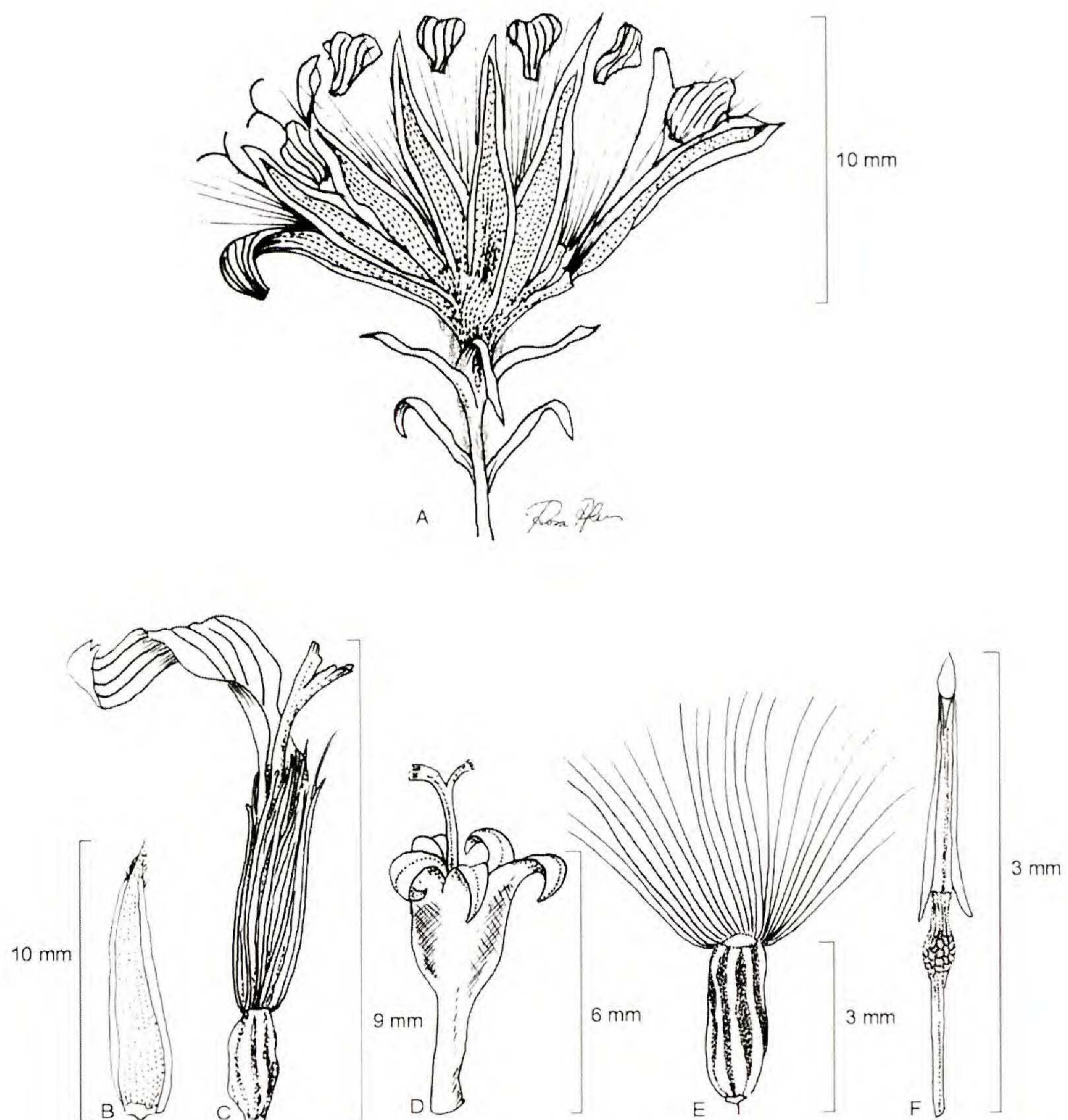


FIG. 2. *Dendrophorium restingae*. A. Head. B. Phyllaries. C. Ray floret. D. Disk floret. E. Cypselae of disk floret. F. Stamen. All from the holotype (SP).

A *Dendrophorium paranense* affinis, sed foliis majoribus valde cordatis (vs. sagittatis) marginibus crenulatisque (vs. regulariter dentata), petiolis non auriculatis, floribus disci 30–35 (vs. usque 25) et cypselis 5–8-costatis (vs. 10-costatis) differt.

**Robust herbs** 1–1.5 m high. Stems fistulose, multisulcate and lanate. **Leaves** alternate, coriaceous, discolorous, glabrous and brownish adaxially and greyish-tomentose abaxially when dry, penninervate with 9–16 secondary veins prominent abaxially, margins crenulate; basal leaves non-auriculate, petiolate, the petioles 5.5–12 cm long, winged, clasping the stem, lanate, the blades ovate-cordate, 7–35 cm long, 6.5–26 cm wide, with apex acute, base cordate; distal leaves sessile and invaginating, the blades oblong, 2–14 cm long, 0.7–3.5 cm wide, with acute apex and obtuse base. **Capitulescences** corymbiform. **Heads** heterogamous,

radiate, peduncle 1–4 cm long, lanate, bracteole lanceolate. **Involucres** 1–1.3 cm long, 1–1.2 cm wide, campanulate, calyculate, calyxulus 5-bracteolate, bracteole 5–6 mm long, linear, glabrous; phyllaries ca. 13, uniserrate, lanceolate, 10–11 mm long, 1.5–2 mm wide, the apex acute and ciliate, the margins glabrous and scarious. **Receptacles** plane, alveolate, epaleaceous. **Ray florets** 4–8, pistillate; corolla liguliform to 13 mm long, bidentate to tridentate apically; style to 10 mm long, branches straight, ca. 1 mm long, the apex with a tuft of pinniculate trichomes. **Cypselae** 3–4 mm long, cylindrical, 5-ribbed, glabrate, with inconspicuous carpopodium; pappus ca. 7 mm long, deciduous. **Disk florets** perfect, 30–35; corolla tubulose, 7–9 mm long, 5-lobate, the lobes 2.5–3 mm long, the midvein visible along the distal half of the tube; stamens with anthers to 3 mm long, exserted, caudate at base to 0.2 mm long, the filaments with anther collar dilated, the connective with an oblong conspicuous appendage to 1 mm long; style 7–12 mm long, branches 1–2.5 mm long, divergent, apex truncate crowned by simple trichomes. **Cypselae** 3–5 mm long, cylindrical, 5–8ribbed, glabrate, carpopodium annuliform; pappus 6–7 mm long, deciduous.

*Dendrophorbiumprestingae* morphologically resembles *Dendrophorbiumparanense* (Malme) Matzenb. & Baptista, but is distinguishable by its crenulate and larger leaves and more ray florets, as well as its distinct geographical range and habitat. The new species so far has been collected only in coastal forests on sandy soils of the state of São Paulo. This area belongs to the edaphic vegetational complex called Restinga that occupies a narrow belt along the Brazilian coast (Veloso et al. 1991; Rizzini 1997). Other endemic species of Asteraceae growing in this environment, such as species of *Noticastrum* from Santa Catarina and Rio Grande do Sul (Zardini 1985) and *Litothamnus* from Bahia (Holmes 1996). Additionally, *D. paranense* occurs in humid soils of riverine habitats in the cloud forests of Paraná, Santa Catarina, and Rio Grande do Sul. Both species can be distinguished by the characters set in the following key:

Leaves coriaceous with crenulate margins; petioles not auriculate; phyllaries apically ciliate; disk florets 30–35, corollas 7–9 mm long; cypselae of disk florets 5–8ribbed

**D. restingae**

Leaves papyraceous with dentate margins; petioles auriculate; phyllaries apically penicillate; disk florets 22–25, corollas 3.5–5 mm long; cypselae of disk florets 10-ribbed

**D. paranense**

**Etymology.**—The epithet alludes to the habitat of the species, the Brazilian coastal vegetation on sandy soils named restinga. Until the present, no species of this genus had been collected in this vegetation.

**Geographical distribution and habitat.**—This species so far has been collected only in restinga vegetation at the Juréia-Itatins Ecological Station, in the municipality of Peruíbe in the state of São Paulo, where it grows in rocky places along the shore line.

**Phenology.**—Flowers and fruits were collected from June to October.

PARATYPE: **BRAZIL. São Paulo:** Estação Ecológica de Juréia-Itatins, Município de Peruíbe, núcleo, praia do Arpoador, vegetação de restinga arbustiva, 18 Oct 2004, Moreno et al. 100 (SP).

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